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SEQUENCE LISTING

5 <110> Li, Chuan-Yuan
 Zhang, Xiuwu
 Dewhirst, Mark W
 10 <120> A NOVEL siRNA-BASED APPROACH TO TARGET THE HIF-ALPHA FACTOR FOR
 GENE THERAPY
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 <151> 2003-10-02
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	Pro Leu Arg Ser Ser Ala Asp Pro Ala Leu Asn Gln Glu Val Ala Leu	
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	Lys Leu Glu Ser Ser Pro Glu Ser Leu Gly Leu Ser Phe Thr Met Pro	
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	Gln Ile Gln Asp Gln Pro Ala Ser Pro Ser Asp Gly Ser Thr Arg Gln	
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	Asp Thr Glu Ala Lys Asn Pro Phe Ser Thr Gln Asp Thr Asp Leu Asp	
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35	ttg gag atg ctg gct ccc tat atc cca atg gat gat gat ttc cag tta	2018
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40	cgt tcc ttt gat cag ttg tca cca tta gag agc aat tct cca agc cct	2066
	Arg Ser Phe Asp Gln Leu Ser Pro Leu Glu Ser Asn Ser Pro Ser Pro	
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	Ser Ala Tyr Ser Gly Thr His Ser Arg Thr Ala Ser Pro Asp Arg Ala	
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	Gly Lys Arg Val Ile Glu Gln Thr Asp Lys Ala His Pro Arg Ser Leu	
	685 690 695	

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	Arg Val Lys Gly Phe Ile Ser Ser Glu Gln Asn Gly Thr Glu Gln Lys			
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	35 40 45	
35	Asn Val Ser Ser His Leu Asp Lys Ala Ser Val Met Arg Leu Thr Ile	
	50 55 60	
40	Ser Tyr Leu Arg Val Arg Lys Leu Leu Asp Ala Gly Gly Leu Asp Ser	
	65 70 75 80	
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	Leu Asn Thr Gln Arg Ser Phe Phe Leu Arg Met Lys Cys Thr Leu Thr	
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 180 185 190

5 His Cys Thr Gly His Ile His Val Tyr Asp Thr Asn Ser Asn Gln Pro
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10 Gln Cys Gly Tyr Lys Lys Pro Pro Met Thr Cys Leu Val Leu Ile Cys
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15 Glu Pro Ile Pro His Pro Ser Asn Ile Glu Ile Pro Leu Asp Ser Lys
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20 Thr Phe Leu Ser Arg His Ser Leu Asp Met Lys Phe Ser Tyr Cys Asp
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25 Glu Arg Ile Thr Glu Leu Met Gly Tyr Glu Pro Glu Glu Leu Leu Gly
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60 Met Lys Met Thr Gln Leu Phe Thr Lys Val Glu Ser Glu Asp Thr Ser
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Ala Pro Ala Ala Gly Asp Thr Ile Ile Ser Leu Asp Phe Gly Ser Asp
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Glu Gln Thr Asp Lys Ala His Pro Arg Ser Leu Lys Leu Ser Ala Thr
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 <223> n can be any nucleotide, up to 4 of which can be missing,
 representing a single stranded loop of from 5-9 bases, the
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 hybridize to each other to form a duplex
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nucleotides 1-19 and 29-47

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20             This sequence forms the double stranded region of a hairpin by
20             intramolecular hybridization with bases 29-47.

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25     <223> 9 base loop structure, which stays single stranded when bases
25             1-19 and 29-47 form a duplex

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30     <223> Antisense strand of an siRNA used to target human HIF-1a.
30             Sequence corresponds to the reverse complement of bases 528-546
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30             a hairpin by intramolecular hybridization with bases 1-19.

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65             human gene to be used to create a negative control siRNA

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